COUNTY BOROUGH OF SOUTHPORT.

REPORT

UPON THE

HEALTH & SANITARY CONDITION

OF THE

County Borough of Southport,

FOR THE YEAR 1909,

BY

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SOUTHPORT:
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County Borough of Southport,

1909.

Southport is situated on the north-west coast of Lancashire, on the south side of the Ribble Estuary, 18 miles to the north of Liverpool, and about 35 miles by rail from Manchester. Aspect, north-west.

Site and Soil.—The town is built on a belt of sandhills, which stretches for some miles along this coast, and behind the town lies a vast plain of agricultural land of many square miles in extent. The houses, except the business premises in the centre of the town, are mostly detached or semi-detached, with large gardens. The streets are broad and well laid out, and many of them are planted on both sides with trees.

There are in the Borough many large **Institutions,** such as the Southport Infirmary, several Convalescent Hospitals and Homes, Sanatoria, a large number of Schools, and a considerable number of Hotels (both large and small).

The Water Supply is obtained from deep wells near Ormskirk, about eight miles from Southport, belonging to the Southport, Birkdale, and West Lancashire Water Board, and is, though rather hard, of exceptional purity. The hardness is principally due to carbonate of lime, and is removed to a considerable extent by boiling. The analysis, by Dr. Thresh, of London, will be found near the end of this Report.

Drainage is by gravitation to the outlet situated about three miles to the north of the town, where the sewage is pumped into tanks, and afterwards passed on to filter beds and treated on the most modern bacteriological principles before its final discharge as a clear effluent into the sea.

Population of Southport at Census, 1901	48,083
Estimated Population at middle of 1909	54,069
Area of Borough (excluding Foreshore, 6,824 acres) in acres	4,233
Birth-rate, per 1,000 living, in 1909	15.46
Death-rate ,, ,, ,, excluding deaths of visitors ...	12.82
Gross Death-rate	13.78
Death-rate from the seven principal Zymotic Diseases	0.26
Deaths of Infants under one year of age per 1,000 births	103

Date of Incorporation, June, 1867.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE OF THE COUNTY BOROUGH OF SOUTHPORT.

Gentlemen,—

Some features of general interest in this Report are the following:—

The birth-rate was the lowest on record, and was 2.99 per 1,000 lower than the average for the previous ten years.

The gross death-rate of 13.78 per 1,000 was, with two exceptions, the lowest on record.

The zymotic death-rate, that is the death-rate from the principal infectious diseases, of .26 per 1,000, was the lowest on record.

The infantile mortality death-rate of 103 per 1,000 was also, with two exceptions, the lowest on record.

VITAL STATISTICS.

The population of Southport, as estimated by the Registrar-General to the middle of 1909 was 54.069.

Assuming the sex distribution to have been the same in 1909 as it was at the time of the Census in 1901, the respective numbers of males and females were, in 1909, as follows:—

Males	22,319
Females	31,750

These figures show the proportion of males to females to be as 100 males to 142 females, or an excess of females over males of 9,431.

The births registered in Southport during the year were 836, of which 446 were males, and 390 females. The resultant birth-rate was 15.46 per 1,000 of the population, which is 1.38 per 1,000 lower than the birth-rate of the previous year, and is 2.99 per 1,000 lower than the average for the previous ten years. This rate was at the highest point of which we have any record in 1877, when it was 33.87 per 1,000. Since that date it has, with slight fluctuations, steadily fallen to its present figure, which is the lowest on record.

The birth-rate of the country generally in 1909 was 25.6 per 1,000.

The number of deaths which occurred in the Borough, including 2 in the Borough Infectious Diseases Hospital in Moss Lane (which, although situated just beyond the Borough Boundary, is counted here as within the boundary), was 745, of which 324 were of males, and 421 of females. These figures give a gross death-rate of 13.78 per 1,000 of the population, against 12.94 per 1,000 the previous year, and is, with two exceptions, the lowest on record.

If from the above 745 deaths are deducted 52 deaths of visitors who came into the town in a precarious state of health, and died after only a short stay here, there remain 693 deaths, from which, by calculation, is obtained a "local" death-rate of 12.82 per 1,000, the lowest "local" death-rate recorded.

The 52 visitors who came into the Borough in a more or less moribund condition were less in number than in the previous year, when there were 85 such visitors.

The average length of stay in Southport of these visitors was 81 days, and varied from one day in the shortest case to 11 months in the longest case. The principal causes of death among these visitors were in numerical importance as follows:—Heart Disease (8), Phthisis (7), Bronchitis (5), and Bright's Disease, Tuberculosis other than Phthisis, and Pneumonia (3 deaths each).

The Zymotic death-rate, or in other words the death-rate from the seven principal Zymotic diseases, viz.: Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, and Diarrhœa, was .26 per 1,000, which is the lowest Zymotic death-rate on record in the Borough. The average rate for the previous ten years was .78 per 1,000.

CONSUMPTION OF THE LUNGS.

The following Report on a Memorandum received from the Local Government Board on administrative measures against Tuberculosis was presented to the Health Committee in November, 1909:—

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

Gentlemen,

It is my duty to bring to your notice a Memorandum received from the Local Government Board in February last, entitled a "Memorandum by the Medical Officer of the Local Government Board on administrative measures against Tuberculosis."

The object of the Memorandum is to draw the attention of Sanitary Authorities to the need and advisability of further steps being taken against all forms of Tubercular Disease, and especially against Pulmonary Tuberculosis, or, as it is perhaps better known to the public, Consumption of the Lungs.

At the end of the year 1908 a circular letter was issued by the Local Government Board, along with the Public Health Tuberculosis 1908 Regulations, drawing the attention of Sanitary Authorities to these new regulations, under which Medical Officers of Health are now informed of all cases of Pulmonary Tuberculosis occurring among persons under the Poor Law, and it is to supplement the information contained in the abovementioned circular and regulations that the memorandum referred to in this report has been issued.

To lessen the prevalence of Pulmonary Tuberculosis among the community, the Memorandum contains many practical suggestions, the full nature and extent of which can best be grasped by a careful perusal of the Memorandum, but they may be briefly indicated under the following headings, viz.:—

The education of the public in the symptoms and nature of the disease, and in the best methods for the prevention of its spread.

The teaching of hygiene in school life, "as an aid in the fight against Tuberculosis."

The education of the patient in measures to be taken for his own good, and for the prevention of the spread of his disease to those about him.

The notification of all cases of the disease to the Sanitary Authority.

More attention to the general sanitary condition of the poor, especially in the matter of housing and overcrowding.

Direct preventive measures, such as the adoption of bye-laws against spitting, the disinfection and cleansing of rooms and houses which have been occupied by patients, and stricter inspection and supervision of dairies, milkshops, milk supplies, and slaughter-houses.

The adoption of measures for the prevention of the dissemination of the expectoration or sputum of patients; including the provision of, and instruction in, the use of spitting cups to poor patients who would not otherwise use them.

For the patient receiving Poor Law relief, there is already the assistance of the Poor Law Medical Service.

For the poor patient above the line of the Poor Law, it is suggested that a Special Tuberculosis Dispensary be instituted, either in connection with already established institutions, or independent of them. "The object of this institution is to secure early diagnosis for patients suspected to be suffering from Pulmonary Tuberculosis and to direct their treatment in the light of knowledge not only of their medical but also of their domestic and industrial needs."

In addition to this Special Tuberculosis Dispensary, it is suggested that each Sanitary Authority should either, by itself or in connection with other districts, establish Sanatoria for the treatment and cure (if possible) of early cases and for the isolation of advanced and hopeless cases, who otherwise are a very great danger to the rest of the community by the wholesale dissemination of infection.

On the matter as it affects Southport I may first point out our present position as to the prevalence of Pulmonary Tuberculosis, and the steps at present taken to deal with the disease, and afterwards suggest what further steps I consider might at once be taken to improve matters, and what steps there are of a wider and more expensive character to radically deal with the problem.

With regard first to the prevalence of the disease in Southport, if we take the figures for the last nine complete years, viz., from 1900 to 1908, they are as follows:—

NUMBER OF DEATHS IN SOUTHPORT FROM PULMONARY TUBERCULOSIS, AMONG PERSONS WHO HAVE RESIDED IN THE BOROUGH FOR AT LEAST TWELVE MONTHS.

				Estimated Population.
In the year	1900	50	deaths	47,550
„	1901	37	„	48,250
„	1902	28	„	48,500
„	1903	25	„	49,669
„	1904	44	„	50,385
„	1905	49	„	51,107
„	1906	58	„	51,837
„	1907	57	„	52,574
„	1908	51	„	53,318

It will be seen that during the first four years of the period, viz., from 1900 to 1903, there was a steady decline in the number of deaths from Pulmonary Tuberculosis in Southport. This was at a time when a good deal of public attention was being given to the various means of preventing the disease.

From 1904 to 1907, however, there was rather an increase in the average number of deaths, while during 1908, and also, it may be added, during the uncompleted present year the figures appear to be again on the decrease.

From the above figures, it will be found that the average number of deaths from Pulmonary Tuberculosis among persons who have resided in the Borough for at least twelve months for the last nine years has been about 44 a year, and if, for every death from the disease, we take it that there are at least three cases which have not so far ended fatally, it may be estimated that annually there are in Southport at least 132 persons suffering from Pulmonary Tuberculosis. Although this figure is only an estimate, it is probably not far wrong. If it errs at all, it probably errs from understatement. However, such as it is, it is a rough guide as to the number of persons to be borne in mind in considering any scheme for dealing with all the consumptive cases in the Borough. At the same time it may be pointed out that probably in Southport some of these 132 persons would be found to be in a position of pecuniary independence, and therefore not likely to require any assistance from any public authority.

Among the measures already taken in Southport to check Tubercular Diseases, notices against spitting in public places are put up in the trams, on the railway stations, and in other places; the milk supply is kept under careful observation in order to prevent the milk of Tuberculous cows being sold in the Borough, and after a death from these diseases the rooms vacated by the deceased persons are disinfected.

Since the year 1901, voluntary notification of Pulmonary Tuberculosis has been in force in Southport, but the notifications received have been very few, there having been only about 21 such notifications in eight years.

Suggestions for dealing with the matter locally may, I think, be divided into two classes, viz.:—

(1) Simple measures which could be carried out with little expense, and at once; and

(2) Measures of a more far-reaching character, which will probably require very serious consideration and involve very considerable expense.

Among the first set of measures, I will place—

The issuing of a circular to medical practitioners, inviting them to assist more thoroughly in the voluntary notification of the disease.

The adoption of bye-laws against spitting in public places, including, if possible, the spitting on the pavements.

The issuing of circulars to the public giving the early symptoms of the disease, and the best means of preventing its spread.

The issuing of circulars to special classes of the community, most liable to the disease.

The teaching of hygiene in the schools.

Instruction by health visitors to mothers, Friendly Societies, Clubs, etc.

The supplying of spitting cups to poor patients, who would otherwise not use them.

The prevention of overcrowding in houses, and enforcement, as far as possible, of good ventilation.

Among the second set of measures may be placed—

The establishment of a special Tuberculosis Dispensary, at which early cases could get satisfactory and prompt attention.

The establishment of a Sanatorium in the Borough, or in connection with the Borough, for the open-air treatment of the disease.

The treatment in a Sanatorium is of great importance, not only as a means of curing a certain proportion of the early cases, but as an educational means by which patients learn not only the most hopeful treatment for their own cure, but also the methods to be adopted by them to prevent the conveyance of their disease to their relatives and others living in the same house with them, and to the rest of the community.

In considering the matter the Committee may be interested in having before them the following information:—

In two towns, viz., Bolton and Sheffield, Pulmonary Tuberculosis is compulsorily notifiable; in the majority of towns it is voluntarily notifiable.

In the following towns provisions has been made for the treatment of cases in a Sanatorium, the number of beds, where known, being given in brackets after the name of the town:—

Belfast.
Birmingham (40 beds).
Manchester (beds at Crossley Sanatorium).
Brighton (30 beds).
Huddersfield (8 beds).
Bury.
Stockport Board of Guardians (24 beds).
Liverpool (74 beds).

I am, Gentlemen,

Your obedient Servant,

JOHN J. WEAVER.

Health Office, Southport,
November 17th, 1909.

The above report appeared on the Minutes of the Council Meeting held on March 8th, 1910, and the Town Clerk was instructed to draft a bye-law prohibiting spitting in public places.

TABLE SHOWING COMPARATIVE RATES FOR DIFFERENT PARTS OF THE BOROUGH.

(Calculated on the nett figures for the five years, 1905 to 1909 inclusive, as given in Tables II. and IV., at the end of this and previous Reports).

	Average Population.	Birth Rate (per 1000 of population).	Death Rate (per 1000 of population).	Infantile Death Rate (per 1000 Births).	Cancer Death Rate (per 1000 of population).	Consumpti'n of Lungs Death Rate (per 1000 of population).
The Six Central Wards, or the business portion of the Borough	30,865	13·08	14·11	109	1·09	1·27
Scarisbrick and Sussex Wards combined, especially a working-class district	11,930	27·91	14·38	103	·98	1·22
Park Ward, a wealthy residential Ward	5,478	5·84	12·56	94	1·57	·62
Hesketh Ward, including Churchtown and Crossens, the most rural Ward in the Borough	4,308	20·84	14·81	105	·93	·79

The above table gives some comparative rates for different divisions of the Borough. The birth rate, it will be seen, as in previous years, is highest (27.91 per 1,000) in the combined Scarisbrick and Sussex Wards, which are principally occupied by the working classes, and is lowest (5.84 per 1,000) in Park Ward, a Ward chiefly occupied by retired people.

INFANTILE DEATH-RATE.

The number of infants who died in the Borough during the year 1909 under one year of age was 86. The number of births during the year was 836, so that the infantile death-rate was 103 per 1,000. This is, with two exceptions, the lowest infantile death-rate previously recorded in the Borough. The average rate for the ten years previous to 1909 was 132 per 1,000.

During the year Nurse Hopner, under the arrangement made between the Corporation and the District Nursing Society, again devoted practically the whole of her time to visiting the mothers of infants, and giving advice and help in the management and care of children. The value of her work is shown by the maintenance of the low death-rate, as compared with the rate of previous years. For the five years before the appointment of the Nurse, the average infantile mortality death-rate was 138 per 1,000, while for the four years since the appointment the rate has been 105 per 1,000.

As bearing on the question of infantile mortality, it may be recorded here that the Notification of Births Act, 1907, was adopted by the Southport Corporation, and came into force in the Borough on February 1st, 1908. Under this Act, medical men and midwives are called upon to notify to the Medical Officer of Health, within 36 hours after the event, the births of all children attended by them. The information so obtained is of great value in the way of preventing early deaths of infants, as previous to the adoption of the above Act, a period of six weeks or more after a birth could elapse before knowledge of that birth was obtained by us, and, in fact, in many cases the death of a child was certified to us before the knowledge of the birth had reached us.

By the earlier information of the birth, obtained under the new Act, the Nurse is now so much earlier enabled to keep a kindly eye on the career of the infant.

INFECTIOUS DISEASES HOSPITAL.

The Hospital contains accommodation altogether for 88 patients. Three wards respectively contain 22 beds, 16 beds, and 10 beds, and an observation ward contains 8 beds. In addition there is a special pavilion, with accommodation for 20 patients, erected for and maintained by the Private Schools Association; and there is also a special pavilion on another site, with 12 beds, for cases of Smallpox. With the exception that two of the older pavilions are becoming somewhat dilapidated externally from age, all these buildings are in good sanitary condition.

The wards are connected together and to the administration block by telephone. An alarm bell has been erected, which can be rung from the distant wards and from the administrative block, in case of need, and arrangements have been recently made for additional provision in case of fire.

The sewage of the Hospital is efficiently dealt with by means of a small installation of bacterial filter beds.

INFECTIOUS DISEASES.

In addition to such diseases as Scarlet Fever, Diphtheria, Smallpox, and others, which are ordinarily compulsorily notifiable in other towns, the following diseases are compulsorily notifiable in Southport, viz.: Chicken Pox, Measles, and Whooping Cough. Consumption of the Lungs is voluntarily notifiable.

The total number of cases of infectious disease notified in the Borough during the year is shown in Table III. at the end of this Report.

SCARLET FEVER.

The number of cases of Scarlet Fever notified during the year was 200, of which 160 were removed to hospital. Further particulars are given in Tables VI. and VII. at the end of this Report.

The following table shows the number of cases notified in the Borough during recent years, and the number of these removed to hospital:—

	No. of Cases of Scarlet Fever notified in the Borough.	No. of Cases Removed to Borough Hospital.	Percentage of Cases Removed to Hospital.
1905	247	177	70 per cent.
1906	180	142	78 ,, ,,
1907	88	60	68 ,, ,,
1908	104	79	76 ,, ,,
1909	200	160	80 ,, ,,

DIPHTHERIA AND MEMBRANOUS CROUP.

There were 46 cases of Diphtheria notified in 1909, as against 34 notified in 1908. The average number for the previous ten years was 33. Four of the cases were fatal.

ENTERIC OR TYPHOID FEVER.

The number of cases of this disease notified during the year was 9, against 16 in the previous year. There were no deaths. The average annual number of cases for the previous ten years was 23, and the average number of deaths 4.6. During the last six years there has been a very striking reduction in the number of cases of, and deaths from, this disease in the Borough. This matter is again referred to in this Report under the heading of Sewer Ventilation.

CHICKEN POX, MEASLES, AND WHOOPING COUGH.

Of the first of these diseases, there were 99 cases notified, against 163 in the previous year. There were no deaths.

The number of cases of Measles notified was 1,183, with seven deaths, and of Whooping Cough 19 cases, with no deaths. In the previous year the numbers were respectively 189 cases with two deaths, and 348 cases with six deaths.

CANCER, MALIGNANT DISEASE.

The number of deaths from Cancer which occurred in the Borough during 1909 was, after deducting the deaths of non-residents in Public Institutions, 51. The number of deaths for each of the previous eight years was as follows: 62, 46, 52, 56, 56, 67, 59, and 57. This death-rate varies considerably, as shown in an earlier table, for different parts of the Borough, Park Ward having the highest Cancer death-rate, viz., 1.57 per 1,000, and Hesketh Ward the lowest, viz., .93 per 1,000. The combined Scarisbrick and Sussex Wards have a rate of .98 per 1,000, and the six central Wards a rate of 1.09 per 1,000. This difference, though slight, is in accord with the usual experience of Cancer and other forms of malignant disease, viz., that they are more prevalent among the leisured and elderly people than among the younger and more active portions of the population.

THE ELEMENTARY SCHOOLS OF THE BOROUGH.

The following Report covers the work done in connection with the Elementary Schools by the Medical Officer of Health in the year 1909 up to the time of the appointment of Dr. Barnes as School Medical Officer:—

COUNTY BOROUGH OF SOUTHPORT.

TO THE CHAIRMAN AND MEMBERS OF THE EDUCATION COMMITTEE.

Ladies and Gentlemen,

During the year 1908 the Elementary Schools, buildings, and offices were kept under constant sanitary supervision, and defective children were examined either at the schools or at the Health Office. When the children were considered unfit to attend school, certificates to that effect were given them, and they were excused from attendance at school. Those that required treatment were advised to seek advice from their own medical man or from the Southport Infirmary.

The practice requiring every child, on returning to school after the holidays, to bring a certificate from its parents to the effect that to the best of their knowledge their child had been free from infectious disease and had not been in contact with any case of infectious disease during the preceding three weeks, was maintained, with apparently decided advantage to the health of the children.

During the year Dr. Bradburne, Ophthalmic Surgeon, attended every Saturday morning at the Science and Art Technical Schools, and there examined the eyes of one hundred school children. Fifty-seven of these children attended a second time to have faults of vision corrected. Forty-three children were given prescriptions for glasses. Thirty of these children were found to have short sight. The largest number of children came from Holy Trinity School, and in order of numbers children also attended from the following schools, viz.: St. Simon and St. Jude's School, Blowick Schools, St. Paul's Schools, St. Cuthbert's School, St. Philip's School, and All Saints' School.

Ninety-six school children during the year had their teeth attended to at the new Dental Department of the Southport Infirmary. This department came into being at the commencement of the year 1908. Previous to that time there had been only one Dental Surgeon attached to the Infirmary, and his visits were only occasional and when required. Under the present arrangement there are five Dental Surgeons giving their services at the Infirmary, and one of the five attends daily for the treatment of patients.

In addition to general advice given as to preservation of the teeth, and the extraction of bad teeth, in many cases teeth are preserved by fillings.

The following circular, containing advice by a Dental Surgeon on the care of the teeth, was also distributed to the parents, and copies have been supplied to the schools:—

GOOD TEETH MEAN GOOD HEALTH.

How to Keep your Teeth.

Teeth decay because food is not cleaned away from them after meals.

Decay begins on the outside and does not pain you. Next it gets to the nerves and you have toothache, and perhaps an abscess and a swollen face.

If your teeth are bad you cannot chew properly, and your food does you less good. This is bad; but it is not the worst. The worst is that bad teeth poison the whole body; frequently they cause dangerous illnesses.

If your teeth are decayed they should have attention. The sooner the better. It is foolish to wait till they ache.

How to Avoid Having Bad Teeth.

You must keep your teeth clean.

How to Clean your Teeth.

With a small tooth brush and common whiting (prepared chalk). You can get enough whiting from the chemist for a penny to last months.

The reason why the brush must be small is because you want to get into all the corners; you must brush your teeth on all their sides, and you must above all remember to work the bristles of the brush upwards and downwards in between the teeth, because it is there that the food sticks and does all the harm. Rinse out your mouth with water when the brushing is finished.

When to Clean your Teeth.

The best time is after your last meal. If you go to bed with a dirty mouth your teeth are in danger all night. If you can manage to brush your teeth after every meal so much the better for you.

Chewing hard food is a great help to the teeth.

If you take care of your teeth it will help you to grow up strong and healthy.

Advice on the preservation of the teeth can be obtained at the Dental Department of the Southport Infirmary, which is open daily—except Sunday—at 9 a.m.

In order to assist the Education Committee in drawing up a scheme for the Medical Inspection of the Children in the Southport Elementary Schools, in September I made the following Report to the Education Committee:—

In compliance with the instructions of the Committee, I beg to make the following suggestions for the carrying out of the Medical Inspection of the Children in the Southport Public Elementary Schools, as required under Section 13 of the Education (Administrative Provisions) Act, 1907.

In Southport at the present time there are about 6,000 children on the books of the Elementary Schools, and taking the school life of each pupil to be about 10 years, it is evident that about 600 children will leave the schools every year, and another 600 children will come into the schools every year to make up for the loss in numbers of those who have left.

According to the Memorandum of the Board of Education (paragraph 12) provision has to be "made by each authority, when the Act has been sufficiently in operation for normal working, for the inspection in each year of (a) the children newly admitted, (b) the children in the schools who have matured for their second inspection, (c) those who have matured for their third inspection, and where practicable (d) of those about to leave school." In the first year (1908), however, the Board are only insisting upon the examination of those children who have newly arrived in the school, and those who are leaving—a total in Southport, as shown above, of 1,200 children. "In the second year (1909) the Board will be satisfied with the inspection of those newly admitted and those leaving, with the addition of those who have matured for their second inspection"—a total in Southport of 1,800 children to be inspected in 1909. When the Act is in full working order there will be four inspections of 600 children at each inspection, making a total of 2,400 children to be annually inspected. It is clear that this number of children to be inspected will be the minimum, as it stands to reason that on the discovery of any defects at any of these examinations in any of the children, it will be necessary for the child to be carefully watched and examined from time to time in order to note any improvement or the reverse.

For the purpose of carrying out the above work, I consider it will be necessary for (1) a School Nurse and (2) an Assistant Medical Officer to be appointed.

The duty of the School Nurse will be to get the children, especially the girls and infants, ready for the inspection by the Medical Officer; to assist the Medical Officer in the inspection of the children, especially in such matters as cleanliness of body and clothing of the children, and in a considerable amount of the clerical work of recording names, addresses, ages, weights, heights, etc., of the children; in arranging for the attendance at the inspections of the parents of the children, as suggested in the Memorandum of the Board of Education; in applying or showing parents how to apply remedies for minor ailments; also in advising on such matters as the antiseptic treatment of discharging ears, treatment of sores and minor skin diseases, or minor diseases of the eye, such as blepharitis and conjunctivitis, the treatment of slight injuries resulting from accidents.

If the above duties, and other work which I suggest further on she might do, did not fully take up her time, her services would be available in visiting the homes of the children, and her help and advice to parents would, I have no doubt, be very valuable in further promoting the improved sanitation of the Borough.

The duty of the School Medical Officer would be to make the actual medical inspection of each child and to be responsible for filling up the forms in all details requiring special medical knowledge, such as the state of the child's heart, lungs, nose, throat, nervous system, vision, mental condition, etc. The amount of time required to be given by the School Medical Officer to the examination of each child has been variously estimated as from ten minutes per child to half-an-hour per child. Only by actual experience of the work can it be discovered how much time is really necessary for the work, but it seems to me that an examination of any child which took only ten minutes, and in that ten minutes to be included an interview with the child's parents, who are to be specially invited to be present at such examination, would be of the nature of a farce and hardly respectful to parents, particularly working-class parents who had sacrificed their time to be present.

The School Medical Officer's duties would also include, as the circular No. 596 of the Board of Education clearly shows, the general supervision of the schools, "in respect of such matters as the surroundings, ventilation, lighting, warming, equipment, and sanitation, including observations on the type and condition of sanitary conveniences and lavatories, water supply for washing and drinking purposes, the cleanliness of schoolrooms and cloakrooms, arrangements for drying children's cloaks and boots, and the relation of the general arrangement of the school to the health of the children."

It would also be the duty of the School Medical Officer to make an Annual Report, in which, in addition to the work mentioned above, a general description must be made of all arrangements made for the co-relation of the School Medical Service with the Public Health Service, and for the organisation and supervision of medical inspection, and an account of the methods of inspection adopted, also a general statement of the extent and scope of the medical inspection carried out during the year; also a general review of the facts disclosed by medical inspection under the headings contained in the Board of Education's circular 582, including tables showing height and weight of children inspected; also a general view of the relation of home circumstances and social and industrial conditions to the health and physical condition of the children inspected; also a review of the methods employed and available for the treatment of defects, such as defective eyesight, carious teeth, etc.; also a review of action taken to prevent the spread of infectious disease; also a review of methods adopted and the adequacy of such methods for dealing with blind, deaf, mentally or physically defective and epileptic children under the Acts of 1893 and 1899; also a review of (1) the methods and results of instruction in personal hygiene and temperance in the schools, (2) the methods and results of physical or breathing exercises in the schools, (3) arrangements for open-air schools, school camps, etc., under Article 44 (g) of the Code of 1908.

Also an account of miscellaneous work, such as the examination of scholarship candidates, pupil teachers, or teachers of any grade—truly, as the circular states, a formidable catalogue of work to be done.

With regard to salaries, I venture to suggest that, in the case of the School Nurse especially, a good salary should be offered, say of at least £100 a year. The work of the Nurse, dealing as it will do with matters of cleanliness of person and clothing of large numbers of children, is one which will require great delicacy and tact on her part, and such work as can, in my opinion, only be done by a Nurse of considerable education, experience, and refinement. If it is attempted by a Nurse without these qualifications I can only anticipate great opposition and friction from the parents, and absolute failure in the work. I therefore suggest that a salary likely to attract such a Nurse be offered.

It has seemed to me possible that the same Nurse who was appointed by the Education Committee could also act for the Health Committee in dealing with the infantile mortality question. This, too, is work requiring great tact and good sense. The Health Committee are at present paying £50 a year to the District Nursing Society for the services of a Nurse for this purpose. The Nurse, however, of the District Nursing Society who was doing this work has recently severed her connection with the Society, and, in view of the possible re-arrangement of the work here suggested, only a temporary arrangement has been made with the District Nursing Society. I should state that the District Nursing Society much regret the possible severance of the connection, which has been in existence for some years, between their Society and the Southport Corporation, but on economic grounds there appears to me to be good grounds for the step. The £50 at present paid by the Health Committee, added to the £50 from the Education Committee, would make a salary of £100 a year for the Nurse, and the Nurse would be entirely under the control of the Corporation. The only question that arises in my mind is whether or not, by combining the two posts, there would be too much work for one Nurse, but perhaps the experiment might be tried, and if found unsuccessful abandoned later.

With regard to the salary of the Assistant School Medical Officer, I can only mention that, judging from the advertisements which have recently appeared in the Medical Press, the salary offered at similar places to Southport varies from £150 to £250 a year.

I would suggest also that, to give an additional inducement to a medical man to apply for such post, the officer appointed be entitled "Assistant Medical Officer of Health," as such title would be found to be to his interest in any future applications he may make for other posts.

This Report was adopted by the Education Committee on September 9th, 1908, and a scheme was subsequently adopted. It was, however, decided by the Council that the duties of the School Medical Officer should be independent of the work of the Health Department, and that the School Nurse should devote the whole of her time to the work of the Education Committee.

On January 7th, 1909, Dr. Patrick, of Partick, Glasgow, was appointed School Medical Officer, and Nurse Gough was appointed School Nurse. On Dr. Patrick, shortly after his appointment, resigning the appointment, Dr. Hodson was appointed in his stead.

On account of infectious disease, the two following schools were closed during the year, viz.: Trinity Wesleyan School, closed in February for 14 days on account of Scarlet Fever; and St. Paul's School, Linaker Street, closed in March for 28 days on account of Measles.

By permission of the Health Committee, and at a time when there were very few other patients in the Infectious Diseases Hospital, four school children were treated at the Hospital for complaints other than infectious disease, viz.: In two cases, discharge from the ears of long standing; and, in two other cases, debility of long standing. All these children had been kept from school for a long period, in one case for years, by their state of health. As a result of treatment at hospital, three of the four children were completely restored to health, and the fourth, although not completely cured of the discharge from her ears, was very much improved in general health.

I am, Ladies and Gentlemen,

Your obedient Servant,

JOHN J. WEAVER.

June 28th, 1909.

In April, 1909, Dr. Barnes was appointed School Medical Officer—his office to be entirely independent of that of the Medical Officer of Health. The Board of Education, however, required a scheme of co-ordination between the work of the School Medical Service under the School Medical Officer, and that of the Public Health Service under the Medical Officer of Health, to be drawn up, and the following scheme was subsequently presented to the Committee, and was adopted by the Town Council on April 20th, 1909:—

INSTRUCTIONS TO THE SCHOOL MEDICAL OFFICER OF THE BOROUGH OF SOUTHPORT FOR SECURING AN EFFECTIVE CO-ORDINATION BETWEEN THE WORK OF THE SCHOOL MEDICAL SERVICE, UNDER THE SCHOOL MEDICAL OFFICER, AND THAT OF THE GENERAL PUBLIC HEALTH SERVICE, UNDER THE MEDICAL OFFICER OF HEALTH.

The Education (Administrative Provisions) Act of 1907, having to some extent conferred on the Education Authority powers concurrent with those which the Corporation exercises as Sanitary Authority, it is extremely important that whilst full use should be made of the powers exercisable under the new Act, yet, at the same time, the School Medical Officer shall, to the fullest extent possible, co-operate with the Medical Officer of Health and the Health Committee of the Corporation, acting under the Public Health and local Acts, and the School Medical Officer must so use the special powers conferred upon the Education Authority that they may result in extending the efficiency of the work in promoting public health hitherto performed solely by the Health Department under the control of the Medical Officer of Health.

In such matters as to the cleansing of persons, disinfection of school premises and houses, the use of the public baths by children of school age, the enforcement of sanitary conditions in the schools and in the homes of the children, the detection or diagnosis of a prevalent disease, the School Medical Officer shall not only keep himself and the Education Committee fully informed, but shall forthwith give information in writing to the Medical Officer of Health, and invoke the assistance of the Sanitary Department, whether under the general law, such as the Public Health Acts or under the local Acts, and he shall monthly, and oftener when required, furnish reports to the Medical Officer of Health on all such matters.

He shall, as far as practicable, deal personally with all outbreaks of infectious disease in the schools, and shall so organise his work that both he and the Medical Officer of Health shall receive immediate information on such occurrence (whether the disease is notifiable or not), so that the matter may be dealt with by the Medical Officer of Health effectually and without confusion at the earliest possible moment, and shall co-operate in such steps as the Medical Officer of Health and the Corporation may determine to take in the matter.

He shall obtain from the Health Department each morning copies of all certificates of the deaths of children of school age, of deaths of all persons from infectious diseases (whether notifiable or not), and of the formal notifications of infectious disease (whether notifiable or not), so that all matters arising out of such certificates and notifications may be dealt with effectually and without confusion at the earliest possible moment, and he shall in all cases in which he considers it is necessary either to close a Public Elementary School, to exclude individual children from such a school, or that endeavours should be made to prevent the holding of a Sunday School, or to arrange for the exclusion of individual children or parents from a Sunday School, make in writing to the Medical Officer of Health his suggestions as to what course he considers it is advisable should be adopted in reference thereto having regard to any child or children in attendance at a Public Elementary School.

He shall report to the Medical Officer of Health in all cases in which he considers that, either from the point of view of education or from that of sanitation, the Health Committee should make an order excluding certain children for a specified time from attendance at school with a view to preventing the spread of disease or any danger to health likely to arise from the conditions of the school, so that the Medical Officer of Health may decide in the difficult questions which often arise when the necessity of closing the school, as distinguished from the exclusion of individual children, is under consideration.

The School Medical Officer shall, on the Monday, preceding the first meeting of the Health Committee in each month, furnish to the Medical Officer of Health reports as to hygienic conditions prevalent in the various schools and in the homes of the children visited by himself or the School Nurse, with special reference to any defects in the ventilation, lighting, sanitation, including observations on the type and condition of sanitary conveniences and lavatories, water supply, and cleanliness of such schoolrooms and houses and the relation of the general arrangements of such schools and houses to the health of the scholars.

The School Medical Officer shall also at once report in writing to the Medical Officer of Health any of such matters which ought to have the attention or be within the cognizance of the Health Department, and any matters which affect, or are likely to affect, the public health.

The School Medical Officer shall report forthwith to the Medical Officer of Health all cases of tuberculosis in teachers, children, or inmates of houses in which school children reside, in addition to the reports as to the existence of notifiable infectious disease.

In order to provide increased opportunity and facilities for the Medical Officer of Health to study the conditions affecting the health of the community at all age periods, and to bring him into closer touch with the personal hygiene of the population, the School Medical Officer shall report regularly each month, on the day aforesaid, to the Medical Officer of Health as to the work of the School Medical Service.

The School Medical Officer shall regularly and systematically make himself acquainted with the administration of the wider branches of public health as carried out by the Medical Officer of Health, including the supervision of the water and milk supplies, food, housing and sanitation, enquiries into matters affecting infant mortality (including ante-natal causes), the work of the Sanitary Inspectors in visiting the houses in which the children reside, sanitary and bacteriological investigations, hospital accommodation, the disinfection of premises, the cleansing of verminous persons, and the prevalence or otherwise of diseases affecting the adult population, and all other conditions which have a bearing, direct or indirect, on the children's health.

The School Medical Officer shall at all times afford to the Medical Officer of Health free access to the records of the School Medical Service.

The School Medical Officer shall be responsible for the direction and supervision of the School Nurse, and shall require regular reports from her of her work, and shall include in his own reports to the Medical Officer of Health all necessary information as to the Nurse's work in any of the particulars mentioned in preceding paragraphs.

The School Medical Officer shall present full monthly reports to the Education Committee, and such reports shall be delivered to the Town Clerk for that purpose on the Monday preceding the first ordinary meeting of the Education (General Purposes) Committee held each month, and the School Medical Officer shall be in attendance at such meeting.

The School Medical Officer shall carry into effect the fundamental principle of the Act with respect to the medical examination and supervision not only of the children known or suspected to be weakly or ailing, but of all children of school age, with a view of adapting and modifying the system of education to the needs and capacity of the child, securing the early detection of unsuspected defects, checking the incipient maladies at their onset, and furnishing the facts, which will guide the Education Committee in relation to physical and mental development during school life.

The School Medical Officer shall

(a) inspect and examine the school children at regular intervals;

(b) give proper and continuous oversight of the sanitation of the school buildings;

(c) take all possible steps to prevent as far as may be the spread of infectious and contagious diseases, including skin diseases;

and shall have regard to the fact that action in these three directions will be incomplete unless

(d) the personal and home life of the child are also brought under systematic supervision,

the home being the point at which health must be controlled ultimately.

The School Medical Officer shall at all times carry into effect the requirements of the Board of Education, as set forth in the Memorandum on Medical Inspection of Children, dated 22nd November, 1907, and shall bear in mind that such memorandum refers only to the minimum medical inspection, and that the effectiveness of the School Medical Service will in future be one of the elements to be considered by the Board of Education in determining the efficiency of each school as a grant-aided school.

Where medical inspection reveals any defects or malady in a particular child, the School Medical Officer shall, if the ailment is a serious one, without delay urge upon the parent the desirability of obtaining treatment by an ordinary medical practitioner, and in the case of minor ailments shall give to the parent the necessary instructions for the treatment of such ailment by the parents (with or without the assistance of the School Nurse) under his instructions. In cases where inspection shows that the provision of spectacles is necessary for the treatment of defective eyesight, the School Medical Officer shall submit the children for examination to Dr. Bradburne, the Oculist appointed by the Committee, so that the eyes of such children may be accurately examined, and appropriate prescription for the necessary treatment and glasses furnished to the parent.

The School Medical Officer shall attend all meetings of the Education (General Purposes) Committee when such Committee sits to deal with School Attendance cases, and shall attend such other meetings of the Education Committee and its Sub-Committee as may be required.

The School Medical Officer shall present any other reports, attend such other meetings, and carry out such other duties as may be from time to time required by the Education Committee.

SLAUGHTER-HOUSES AND MEAT AND FOOD INSPECTION.

The inspection of meat is carried out by Inspector Hartley, who, although he does not hold a special certificate in meat inspection, was, before his appointment, a practical butcher and engaged in the trade of a butcher. He devotes the whole of his time to his duties, and visits the public and five private slaughter-houses as often as is practicable during the slaughtering. At the public slaughter-houses there is also a caretaker, whose duty it is, in the absence of the Meat Inspector, to note anything of an unusual or suspicious character in the animals or the meat, and to at once inform the Inspector.

The following visits were made by the Inspector during the year:—

To the Market Hall	312	visits
To the Public Slaughter-houses	324	,,
To the Private Slaughter-houses	186	,,
To Pig-keepers' Premises	500	,,
To Tripe Boilers, Tradesmen's and other Premises	3298	,,
Total Visits	4620	

Four cows and three heifers were condemned and destroyed on account of tuberculosis. Six of these animals had been slaughtered at the public slaughter-houses, and one at a private slaughter-house.

Eight animals were slightly affected with tuberculosis. The affected parts were removed and destroyed, and the remainder passed as fit for food. Three tuberculous pigs were seized and destroyed. One of these was found at a pork shop, another at the public slaughter-houses, and the Inspector's attention was called to the third on the owner's premises.

The following foodstuffs were also surrendered and destroyed:—

2	bags of Dutch picked shrimps.
1	basket of rough shrimps.
4	tins of prawns.
30	frozen rabbits.
3	crates of bananas.
1	box of fish.
2	forequarters of beef.

During the year 13 sheep were found dead in the fields and in the cattle pens at the slaughter-houses. These were destroyed.

DAIRIES, COWSHEDS, AND MILKSHOPS.

The above premises have been regularly visited during the year, and their condition, and that of all milk-supplying cows, both within the Borough, and also by virtue of the powers obtained in the Southport Corporation Act of 1900, as far as practicable outside the Borough, kept under careful observation.

During the year 72 samples of milk were chemically analysed. Of these, 65 were found to be genuine and of good quality. Of the remaining seven, three were deprived of from 2 to 7 per cent. of fat, two samples contained 6 and 10 per cent.

respectively of added water, and two samples contained small quantities of boric acid. In the two cases of added water legal proceedings were taken and withdrawn on payment of costs. In the other cases, letters of warning were sent to the vendors by the Town Clerk.

Twenty-six samples of milk were examined bacteriologically. Of these, two were certified to be tubercular. Careful investigation and examination by the Veterinary Surgeon and the Inspector of the cattle on the farms from which the samples were taken was made, but no diseased animal could then be found. Several cows, however, had been removed or sold from the farms between the time of taking the sample and our knowledge of the result of the bacteriological examination.

Many samples of milk have been taken on its arrival by the early morning trains. In some cases the milk has been found dirty, and the producers warned.

In the Borough one cowkeeper has increased and improved his accommodation. The new regulation prohibiting the keeping of horses in cowsheds along with cattle has been now in all cases complied with.

Two purveyors have provided milk stores on their respective premises detached from other buildings.

At milk farms outside the Borough, two new cowsheds on modern principles have been erected, another cowshed has been considerably enlarged, another has been reconstructed, six have been improved in matters of drainage, lighting, and ventilation.

Among the districts that have taken considerable trouble and expense in improving the condition of the rural shippons may be especially mentioned the Preston Rural District Council.

The Inspector of Dairies and Cowsheds has called in the assistance of the Veterinary Inspector to examine forty-nine cows in the Borough on account of suspicion of tuberculosis; none, however, were found to be tubercular. Thirteen samples of milk from the rural districts were examined bacteriologically, but none found tubercular.

HOUSE TO HOUSE INSPECTION.

During the last three years house to house inspection, including in all cases an examination of the drains of the premises, has been again systematically carried out by Inspectors Halsall, Cadwell, and Peet. The following streets have, during the year, been dealt with, viz.: Oak Street, Sussex Road, Lime Street, Maple Street, Clifton Road, Manning Road, Cypress Road, Morven Grove, Lesley Road, Beacham Road, Daisy Walk, Willow Grove, Laurel Grove, Hawthorn Grove, Bright Street, Newton Street, Hazel Grove, Laburnum Grove, Brompton Road, Olive Grove, Myrtle Grove, Palm Grove, Lansdowne Road, Shelley Grove, Fir Street, Peel Street, and part of Hawkshead Street. In all, 1,096 houses and premises were inspected and reported upon. Many minor defects, such as cracked or broken pipes, etc., were discovered and remedied, and in some cases re-drainage, on account of defective gradient, was found necessary.

PUBLIC WATER SUPPLY.

The town's water is supplied by the Southport, Birkdale, and West Lancashire Water Board, and is obtained from deep wells in the New Red Sandstone near Ormskirk, about eight miles from Southport. Though somewhat hard from the presence of carbonate of lime (which, however, is partly removed on boiling), it is, as the analysis (a copy of which will be found at the end of this Report) by Professor Thresh of London, shows, of exceptional purity.

CLOSET ACCOMMODATION.

Although Part III. of the Public Health Acts Amendment Act, 1907, has not yet been put in force in the Borough, all privies, with the exception of a few in parts of the Borough too far removed from any sewer for conversion, have been now for some years entirely abolished and proper ashpits and water-closets substituted. Although, up to about four years ago, waste-water closets, such as the Bristol eject closets, were allowed to be put in new buildings, since that time water-closets of a modern type only have been allowed.

SEWER VENTILATION.

Some years ago, on account of the number of complaints of offensive smells arising from open manholes in the street, the matter of sewer ventilation engaged for some time the very serious and constant attention of the Health Committee. After trying various methods at considerable expense and trouble, with more or less success, it was finally decided to close all surface manhole grids as far as practicable, and ventilate the sewers by means of Webb's Patent Ventilating Lamps. This policy was commenced at the end of the year 1901, was more completely carried out in 1903 and 1904, and has since been maintained with excellent results. At the end of the year 1909 there were 44 of these lamps in use in the Borough. For several years now there has hardly been a complaint of sewer smells, and never from one of the lamps, and coincidentally with the adoption of this policy there has been, as will be seen in Tables VI. at the end of this Report, a very marked decrease in the number of cases of, and deaths from, Typhoid Fever in the Borough. The average number of cases of Typhoid Fever notified annually during the ten years ending in 1903 was 36, while since 1904 the annual average number was 12 cases.

THE NEW SEWAGE WORKS AT CROSSENS.

The Sewage Disposal Works, erected at Crossens at a cost, including the land, of about £35,000, which commenced working about two-and-a-half years ago, have during the year been added to by the addition of six more continuously acting bacterial filter beds, making a total of twelve in operation, each 100 feet in diameter (and three more in course of construction). By these means an excellent effluent is being obtained, and an uninterrupted flow of the sewage maintained at all states of weather or tide.

GENERAL SANITARY WORK.

The following table shows the nature and amount of work done during the year by the Highway Department under orders sent to it by the Health Department, and also the corresponding figures for the two preceding years:—

	1907.	1908.	1909.
Houses re-drained	26	81	129
House drains unstopped	550	567	460
Midden privies converted into W.C.'s	8	18	1
Wet ashpits converted into dry	5	18	1
Sundry structural nuisances abated	1313	1814	1380
Totals	1902	2498	1971

The following table shows roughly the amount and nature of the work done by the Inspectors of Nuisances:—

	1907.	1908.	1909.
Nuisances reported to Health Committee	1580	2103	2196
Nuisance Inspections not reported to Health Committee	14336	12957	14058
Visits to Workshops (and reports)	599	463	444
,, Bakehouses (and reports)	163	74	143
,, Laundries	9	10	21
,, Dairies, Cowsheds, and Milkshops	322	364	389
,, Common Lodging Houses	200	228	305
Visits under Shop Hours Act	58	—	—
Visits in connection with offensive trades	100	50	97
Notices served	1477	1412	1384
Houses without proper Water Supply reported	0	4	2
Smoke Prevention observations	5	13	8
Houses disinfected	181	189	266
Enquiries into notifications of Infectious Diseases	904	872	1664
Removal of Cases to Hospital	75	102	191
Houses examined and reported as unfit for habitation	2	0	1
Visits to Ice Cream Vendors	24	40	26
,, Piggeries	460	500	500
Examinations and Testing of House Drains and Sanitary Fitments	397	1071	1295
Sanitary Certificates issued	20	17	12

SAMPLES OF FOOD AND DRUGS TAKEN FOR ANALYSIS.

Under the provisions of the "Sale of Food and Drugs Act," the following samples were taken:—

	No. of Samples taken.	Result.
Milk	72	65 samples were genuine. Of the remaining seven, three had been deprived of small quantities of fat, and these vendors were cautioned. Two samples had been slightly watered, and the vendors on prosecution were let off with payment of costs. In two other cases, small quantities of boric acid had been added. The vendors were cautioned.

	No. of Samples taken.	Result.
Butter	31	One sample contained 85 per cent. of foreign fats, and one sample contained 26 per cent of boric acid. In the former case the vendor was prosecuted and had to pay costs.
Lard	5	Genuine.
Shredded Beef Suet	4	Three samples taken formally contained from 21 to 25 per cent. of rice flour. The manufacturers were interviewed, and they undertook to indicate on the outside of the boxes that flour was blown on to the suet in its manufacture.
Refined Beef Suet	1	Genuine.
Cheese	5	One sample contained 10 per cent. of foreign fats. A letter was written by the Town Clerk, and the vendor was also seen and personally warned.
Pepper	5	Genuine.
Coffee	4	One sample taken informally contained 40 per cent. of chicory. A second sample taken formally at the same place was genuine.
Chicory	1	Genuine.
Cured Fish	2	Genuine.
Jam	2	One sample contained 35 grains per lb. of boric acid. One sample was coloured with red dye.
Margarine	9	Genuine.
Toffee	4	Genuine.
Curry Powder	1	Genuine.
Brawn	1	Contained 25.17 grains per lb. of boric acid.
Ammoniated Tincture	1	Genuine.
Liquorice Powder	1	Genuine.
Milk of Sulphur	1	Genuine.
Ground Ginger	1	Genuine.
Cream of Tartar	1	Genuine.
Potted Shrimps	1	Contained 19 grains per lb. of boric acid.

Sausages	4	One sample contained 29.93 grains per lb. of boric acid.
Cream	1	Contained 23 per cent. of boric acid.
Tea	2	Genuine.
Oatmeal	1	Genuine.
Cayenne Pepper	1	Genuine.
	162	

Of the above samples, 121 were taken formally, and 41 informally.

THE ADMINISTRATION OF THE FACTORY AND WORKSHOP ACTS.

The condition of the Factories and Workshops in the Borough was, on the whole, satisfactory. The principal defects found were want of cleanliness, insufficient ventilation, and in some cases want of separate closet accommodation for the two sexes; also a few of the water-closets were not sufficiently screened off, and there were no fastenings on the doors; in several cases water-closet doors have been found opening directly into workrooms, and these have been remedied. The premises of all home-workers were visited, and found to be clean and in a satisfactory condition.

The lists of outworkers were in all cases forwarded twice a year without default.

No legal proceedings were taken during the year.

The eight underground bakehouses comply with all requirements of the Sanitary Authority, and are, strictly speaking, only called (in the case of five of them), "underground" bakehouses because parts only of the bakehouse are underground.

The sanitary condition of the bakehouses generally in the Borough was good.

MIDWIVES ACT OF 1902.

The number of midwives enrolled in Southport at the end of 1908 was 22, and the duties imposed upon the Corporation by the Midwives Act have been carried out during the year, and all the midwives visited and their case books, appliances, etc., examined by Nurse Hopner. Their attention has also during the year been called to the importance of taking the temperature and pulse of patients, with a view of obtaining early information of puerperal fever, etc.

At the end of this Report will be found five tables of statistics, made out according to the forms required by the Local Government Board; two tables dealing with Infectious Diseases; a table of the Vital Statistics of Southport for the last 39 years; and a Report on the administration of the Factory and Workshop Acts in Southport.

The Meteorology of Southport and District is dealt with separately in the Annual Reports of the Fernley Observatory by Mr. J. Baxendell, F.R.Met.S.

I am, Gentlemen,

Your obedient Servant,

JOHN J. WEAVER.

Town Hall, Southport.

REPORT ON THE EXAMINATION OF A SAMPLE OF WATER FROM THE CORPORATION OF SOUTHPORT, by JOHN C. THRESH, D.Sc. (Lond.), M.D. (Vic.), D.P.H. (Camb.), Lecturer on Public Health, London Hospital Medical College; Medical Officer of Health, Essex County Council; Fellow of Institute of Chemistry; Member of Society of Public Analysts, etc., etc.; Author of "Water and Water Supplies," "Water Analysis," etc.

Date, December 6th, 1909.

Public Health Laboratories,
London Hospital Medical College, London, E., and Chelmsford.

Report on Sample of Water from Southport, taken on November 29th, 1909, from tap at 10, Lord Street West.

This water contains no objectionable saline matter, though it is hard. It is of great organic purity, and examined bacteriologically no bacteria indicating the presence of polluting matter could be discovered. The hardness is practically the same as when previously examined. There has been a slight variation in the saline constituents, but these do not affect the quality of the water.

It is a wholesome water for drinking purposes, and a purer water could not be desired.

(Signed) JOHN C. THRESH.

DATA.

Respecting a sample of water from Southport Corporation received November 30th, 1909.

Labelled: "Taken from a draw-off tap connected direct with the main at 10, Lord Street West, Southport."

Particulars of Source: 10-45 a.m., 29/11/'09. Signed, A. Kendall, Town Hall, Southport. Sealed.

PHYSICAL EXAMINATION.

Turbidity: Clear and bright.

Colour: Faint green tint. Odour: None. Reaction: Alkaline to lacmoid.

CHEMICAL EXAMINATION.

Results expressed in parts per 100,000.

Ca. 7.5	Mg. 2.5	Na.	Fe. .0	CO_3 15.0	SO_4 3.9	Cl. 3.8	NO_3 1.0		Probable Combinations.	
7.5	...	...	...	11.25	...	...	...	...	Calcium Carbonate	18.75
...	1.5	...	...	3.75	...	...	...	...	Magnesium Carbonate ...	5.25
...	1.0	...	...	...	3.9	...	...	...	Magnesium Sulphate ...	4.9
...	...	2.5	...	...	...	3.8	...	...	Sodium Chloride...	6.3
...	...	.35	...	...	...	...	1.0	...	Sodium Nitrate ...	1.35
...	...	...	...	...	...	...	...	...	Silica, etc. ...	.25
Total solid constituents dried at 180°C.										36.8

Hardness, Temporary 20°, Permanent 9° .... Total	29°
Free Ammonia	0.0090
Organic Ammonia	0.0012
Oxygen absorbed in 3 hours at 37°C....................................	0.0160
Nitrites	Nil

Note.—To convert the above parts per 100,000 into grains per gallon, multiply by .7.

(Signed) JOHN C. THRESH and JOHN F. BEALE.

Dec. 6th, 1909.

London Hospital Medical College, London, E., and Chelmsford.

Report on the Bacteriological Examination of a Sample of Water received on November 30th, 1909, from Southport Corporation:—

Source: Tap on main at 10, Lord Street West, Southport.

Number of organisms per cubic centimetre capable of growing on alkaline nutrient jelly at 20°C in 4 days, and counted by aid of pocket lens	103
Number of organisms on Agar per c.c. in 24 hours	22

Smallest quantity of water in which growth occurred, with production of acid and gas in bile salt, glucose broth (1, 5, 10, or 20 c.c.) 1.c.c

Nature of organisms found in this growth: Bacillus Coli not present in 36 c.c.

Reaction of the bacillus enteritidis sporogenes,	in 10 c.c.—negative.
	in 100 c.c.— ,,
	in 110 c.c.— ,,

(Signed) JOHN C. THRESH and JOHN F. BEALE.

FACTORY AND WORKSHOP ACTS.

The following Report is made out in accordance with the requirements of the Home Office, to whom a copy of this Report has to be sent.

Factories, Workshops, Laundries, Workplaces, and Homework.

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of Inspections	Number of Written Notices.	Number of Prosecutions.
FACTORIES (Including Factory Laundries.)	25	—	None.
WORKSHOPS (Including Workshop Laundries.)	403	27	None.
WORKPLACES	23	1	None.
Total	451	28	None.

2.—DEFECTS FOUND.

Particulars.	Number of Defects. Found.	Number of Defects. Remedied.	Number of Defects. Referred to H.M. Inspector.	Number of Prosecutions.
Nuisances under the Public Health Acts—*				
Want of Cleanliness	16	16	None.	None.
Want of Ventilation	4	4	,,	,,
Overcrowding	None.	None.	,,	,,
Want of Drainage of Floors	1	1	,,	,,
Other Nuisances	11	11	,,	,,
||Sanitary Accommodations — insufficient	None.	None.	,,	,,
||Sanitary Accommodations — unsuitable or defective	7	7	,,	,,
||Sanitary Accommodations — not separate for sexes	5	4	,,	,,
Offences under the Factory and Workshop Act—				
Illegal occupation of Underground Bakehouse (S. 101)	None.	,,	,,	,,
Breach of special Sanitary Requirements for Bakehouses (SS. 97 to 100)	,,	,,	,,	,,
Other Offences	,,	,,	,,	,,
Total	44	43	,,	,,

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*Including those specified in sections 2, 3, 7 and 8, of the Factory and Workshop Act as remediable under the Public Health Acts.

||Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted in Southport The standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops is in accordance with the Sanitary Accommodation Order of 4th February, 1903.

3.—HOME WORK.

NATURE OF WORK.*	OUTWORKERS' LISTS, SECTION 107.								Inspections of Outworkers' Premises.	Outwork in Unwholesome Premises Section 108.	
	Lists received from Employers.						Addresses of Outworkers.				
	Twice in the Year.			Once in the Year.							
	† Lists.	Con-trac'rs	Work-men.	† Lists.	Con-trac'rs	Work-men.	Received from other Councils.	For-warded to other Councils.		Instances	Notices Served.
Wearing Apparel—											
Making, &c.	30	17	54	15	8	29	...	14	15	...	...
Lace, lace curtains & nets..	...	...	...	...	...	...	2	...	1	...	...
Furniture and Upholstery..	4	...	4	2	...	2	...	...	2	...	...
Umbrellas, &c.	4	10	1	2	5	...	...	...	...	...	...
Racquet and Tennis Balls..	2	5	...	1	...	3	...	...	...	...	...
Nets, other than Wire Nets	2	2	...	1	1	...	...	...	...	...	...
Basket Making	2	...	2	1	...	1	...	...	1	...	...
Total	44	34	61	22	14	35	2	14	19	...	...

*No occupier gives out work of more than one of the classes specified in column 1.

† The Lists are received twice in each year. The year's figures in the table are obtained by adding together the two half-yearly totals.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Dressmakers	475
Milliners	
Tailors	
Bakers	
Boot and Shoe Makers	
Joiners	
Plumbers	
Upholsterers	
Jewellers	
Cabinet Makers	
Total number of workshops on Register	475

5.—OTHER MATTERS.

Class.		Number.
Matters notified to H.M. Inspectors of Factories—		
Failure to affix Abstract of the Factory and Workshop Act (S. 133)		22
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)	Notified by H.M. Inspector	15
	Reports (of action taken) sent to H.M. Inspector	15
Four cases of working longer than the prescribed time and two cases of unfenced Machinery		6
Underground Bakehouses (S. 101)—		
Certificates granted during the year		None.
In use at the end of the year		8

March 23rd, 1910.

JOHN J. WEAVER,

Medical Officer of Health.

TABLE I.

Vital Statistics of Whole District during 1909 and Previous Years.

COUNTY BOROUGH OF SOUTHPORT.

Year.	Population estimated to middle of each year.	Births.		Total Deaths Registered in the District				Total Deaths in Public Institutions in the District.	Deaths of Non-Residents registered in Public Inst'tions in the District.	Deaths of Residents registered in Public Inst'tions beyond the District.	Nett Deaths at all Ages belonging to the District.	
				Under 1 year of age.		At all Ages.						
		Number	Rate.*	Number.	Rate per 1000 Births registered	Number.	Rate.*				Number.	Rate.*
1	2	3	4	5	6	7	8	9	10	11	12	13
1899	46,844	1009	21·54	167	165	816	17·46	71	37	30	809	17·27
1900	47,550	969	20·38	140	144	788	16·57	68	23	35	800	16·82
1901	48,250	937	19·42	153	163	779	16·15	56	27	24	776	16·08
1902	48,500	942	19·42	134	142	743	15·32	64	27	30	746	15·38
1903	49,669	904	18·20	125	138	718	14·45	64	29	25	714	14·37
1904	50,385	882	17·51	114	129	720	14·29	51	22	31	729	14·47
1905	51,107	921	18·02	103	112	694	13·58	50	20	26	700	13·69
1906	51,837	849	16·38	98	115	751	14·49	57	23	29	757	14·60
1907	52,574	881	16·76	86	98	754	14·34	61	21	41	774	14·72
1908	53,318	898	16·84	93	104	690	12·94	67	28	44	706	13·24
Averages for years 1899-1908	50,003	919	18·45	121	131	745	14·96	61	26	31	751	15·06
1909	54,069	836	15·46	86	103	745	13·78	55	16	32	761	14·07

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Note.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public institutions" taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses, and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made is given below.

Total population at all ages	48,083	At Census of 1901
Number of Inhabited Houses	9511	
Average Number of Persons per House	5·05	
Area of District in acres (exclusive of area covered by water).....................	4233	

I. Institutions within the District receiving sick and infirm persons from outside the District.	II. Institutions outside the District receiving sick and infirm persons from the District.	III. Other Institutions, the deaths in which have been distributed among the several localities in the District.
Children's Sanatorium. Convalescent Home. Convalescent Hospital. Home for the Blind, Roe Lane Hydropathic Hospital. Southport Infirmary. Bradstock-Lockett Home.	Moss Lane Infectious Diseases Hospital. Ormskirk Workhouse. County Lunatic Asylum, Lancaster.	

The Union Workhouse is not within the District.

TABLE II.

Vital Statistics of separate Localities in 1909 and previous years.

COUNTY BOROUGH OF SOUTHPORT.

NAMES OF LOCALITIES.	WHOLE DISTRICT.				1.—SIX CENTRAL WARDS, (being especially the business portion of the Borough)				2.—SCARISBRICK and SUSSEX WARDS (especially working-class districts.)				3.—PARK WARD (a wealthy, residential ward.)				4.—HESKETH WARD (including Churchtown and Crossens, the most rural ward in the Borough.)			
YEAR.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
	a.	b.	c.	d.	a.	b.	c	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.
1899	46,844	1009	809	167	The present arrangement of Wards, out of which the above localities are formed, was made in 1898.															
1900	47.550	969	800	140	27,911	448	464	56	10,788	384	166	67	4955	32	60	3	3896	105	62	9
1901	48,250	937	776	153	28,322	466	463	81	10,947	350	193	56	5027	22	55	1	3954	99	65	18
1902	48,500	942	746	134	28,469	459	454	62	11,004	358	175	60	5053	27	64	5	3974	98	53	7
1903	49,669	904	714	125	29,155	443	426	61	11,269	333	178	52	5175	34	57	2	4070	94	53	10
1904	50,385	882	729	114	29,575	421	413	64	11,431	347	184	42	5250	31	68	2	4129	83	64	9
1905	51.107	921	700	103	29,999	439	424	50	11,595	351	148	37	5325	31	65	4	4188	100	63	12
1906	51.837	849	757	98	30,428	417	452	51	11,761	331	175	40	5401	26	75	2	4247	75	55	6
1907	52,574	881	774	86	30,861	438	472	46	11,928	314	174	27	5478	32	64	4	4307	97	65	10
1908	53.318	898	706	93	31,298	428	395	40	12,097	344	167	35	5555	36	75	5	4368	90	69	12
Average of years 1899 to 1908 …	50.003	919	751	121																
1909	54.069	836	761	86	31,739	389	435	45	12,267	325	194	33	5633	35	65	0	4430	87	67	7

NOTE.—(*a*) The separate localities adopted for this table are areas of which the populations are obtainable from the census returns.

(*b*) Deaths of residents occurring in public institutions beyond the district are included in sub-columns *c* of this table, and those of non-residents registered in public institutions in the district excluded.

(*c*) Deaths of residents occurring in public institutions, whether within or without the district, are allotted to the respective localities according to the addresses of the deceased. Sub-column *c* of "whole district" corresponds with column 12 in Table I.

TABLE III.—CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1909.

COUNTY BOROUGH OF SOUTHPORT.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.				NUMBER OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.			
	At all Ages.	At Ages—Years.						1	2	3	4	1	2	3	4
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.								
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup	46	...	13	23	5	5	...	24	18	2	2	11	10	...	2
Erysipelas	24	...	1	1	1	18	3	14	8	1	1	...	...	...	...
Scarlet Fever	200	1	39	139	15	6	...	55	73	18	54	41	58	11	50
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	9	...	...	2	2	5	...	6	1	2	...	2	1	...	...
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	2	...	...	...	1	1	...	1	...	...	1	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	99	4	33	61	1	...	...	72	13	12	2	...	...	...	...
Measles	1183	40	520	588	20	15	...	546	423	47	167	2	...	...	...
Whooping Cough	19	4	9	6	...	...	...	13	4	1	1	...	...	...	...
Totals	1582	49	615	820	45	50	3	731	540	83	228	56	69	11	52

NOTE.—The localities adopted for this table are the same as those in Tables II. and IV.

Isolation Hospital—Moss Lane Hospital, in the West Lancashire Rural District. Total available beds, 88.

Number of Diseases that c be concurrently treated, 6.

TABLE IV.

Causes of, and Ages at, Death during Year 1909.

CAUSES OF DEATH	Deaths at the Subjoined Ages of "Residents," whether occurring in or beyond the District.							Deaths at all Ages of "Residents" belonging to Localities, whether occurring in or beyond the District				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Six Central Wards.	Scarisbrick and Sussex Wards.	Park Ward.	Hesketh Ward.	
1	2	3	4	5	6	7	8	9	10	11	12	
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...
Measles	7	1	6	...	...	...	...	4	1	...	2	...
Scarlet Fever	2	...	2	...	...	...	...	1	...	...	1	1
Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	4	...	3	1	...	...	...	2	2	...	...	1
Croup	...	...	...	...	...	...	...	...	...	...	...	...
Fever: Typhus	...	...	...	...	...	...	...	...	...	...	...	...
Fever: Enteric	...	...	...	...	...	...	...	...	...	...	...	...
Fever: Other continued	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza	11	1	...	...	...	6	4	6	3	2	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa*	1	1	...	...	...	...	...	1	...	...	...	...
Enteritis*	12	6	1	1	...	3	1	4	7	...	1	1
Gastritis*	2	2	...	...	...	...	...	2	...	...	...	...
Puerperal Fever	1	...	...	...	...	1	...	1	...	...	...	1
Erysipelas	1	...	...	...	...	1	...	...	1	...	...	...
Phthisis (Pulmonary Tuberculosis)	50	...	2	1	7	37	3	30	12	5	3	...
Other Tuberculous Diseases	18	4	3	1	1	9	...	11	5	...	2	5
Cancer, Malignant Disease*	51	...	...	...	1	24	26	26	15	5	5	1
Bronchitis	69	4	2	...	...	16	47	43	18	2	6	1
Pneumonia	49	4	13	2	2	13	15	26	13	4	6	3
Pleurisy	2	...	1	...	...	1	...	...	1	...	1	...
Other Diseases of Respiratory Organs	8	1	...	...	...	1	6	5	2	1	...	...
Alcoholism, Cirrhosis of Liver	18	...	...	...	...	14	4	6	7	2	3	...
Venereal Diseases	...	...	...	...	...	...	...	...	...	...	...	...
Premature Birth	15	15	...	...	...	...	...	10	3	1	1	...
Diseases & Accidents of Parturition	5	...	...	...	1	4	...	3	1	1	...	...
Heart Diseases	99	2	...	1	1	45	50	52	27	10	10	10
Accidents	9	...	2	3	...	3	1	7	2	...	...	6
Suicides	2	...	...	...	...	2	...	2	...	...	...	...
All other causes	325	45	8	10	7	85	170	192	75	32	26	25
All causes	761	86	43	20	20	265	327	435	194	65	67	55

* See Notes at back.

NOTES TO TABLES IV. AND V.

(a) In Table IV., all deaths of "Residents" occurring in public institutions, whether within or without the district, are included with the other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-12, included among the deaths in their respective "Localities" according to the previous addresses of the deceased as given by the Registrars. Deaths of "Non-residents" occurring in public institutions in the district are in like manner excluded from columns 2-8 and 9-12 of Table IV.

(b) See notes on Table I. as to the meaning of "Residents" and "Non-residents," and as to the "Public Institutions" taken into account for the purposes of these Tables. The "Localities" in Table IV. are the same as those in Tables II. and III.

(c) All deaths occurring in public institutions situated within the district, whether of "Residents" or of "Non-residents," are, in addition to being dealt with as in note (a), entered in the last column of Table IV. The total number in this column equals the figures for the year in column 9, Table I.

(d) The total deaths in the several "Localities" in columns 9-12 of Table IV. equal those for the year in the same localities in Table II., sub-columns c. The total deaths at all ages in column 2 of Table IV. equal the gross total of columns 9-12 and the figures for the year in column 12 of Table I

(e) Under the heading of "Diarrhœa" are included deaths registered as due to Epidemic diarrhœa, Epidemic enteritis, Infective enteritis, Zymotic enteritis, Summer diarrhœa, Dysentery and Dysenteric diarrhœa, Choleraic diarrhœa, Cholera and Cholera Nostras.

Deaths from Diarrhœa secondary to some other well-defined disease are included under the latter.

Deaths from Enteritis, Muco-Enteritis, Gastro-Enteritis, and Gastritis (see under the heading Diarrhœal Diseases in Table V.) in Tables IV. and V. are placed immediately below, but separately from, those enumerated under the heading Diarrhœa as defined by enumeration above.

(f) Under the headings of "Cancer" and "Puerperal fever" are included all registered deaths from causes comprised within these general terms. Thus: Under "Cancer" are included deaths from Cancer, Carcinoma, Malignant disease, Scirrhus, Epithelioma, Sarcoma, Villous tumour, and Papilloma of bladder, Rodent ulcer. Under "Puerperal fever" are included deaths from Pyæmia, Septicæmia, Sapræmia, Pelvic peritonitis, Peri- and Endo-Metritis occurring in the Puerperium.

(g) Under "Congenital Defects" in Table V. are included deaths from Atelectasis, Icterus neonatorum, Navel hæmorrhage, Malformations and Congenital hydrocephalus.

(h) Under "Tuberculous Meningitis" are included deaths from Acute hydrocephalus.

(i) Under "Other Tuberculous Diseases" are included deaths from Tuberculosis, Tuberculosis of bones, joints and other organs, Lupus and Scrofula.

(j) All deaths certified by Registered Medical Practitioners and all Inquest cases are classed as "Certified;" all other deaths are regarded as "Uncertified."

In recording the facts under the various headings of Tables I., II., III., IV., and V., attention has been given to the notes on the Tables.

JOHN J. WEAVER,

Medical Officer of Health

February 25th, 1910.

TABLE V.

Infantile Mortality during the Year 1909.

Deaths from stated Causes in Weeks and Months under One Year of Age.

COUNTY BOROUGH OF SOUTHPORT.

See Notes at back of Table IV.

CAUSE OF DEATH		Under 1 week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 Month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total Deaths under One Year
All Causes.	Certified	20	2	5	8	35	10	7	5	...	5	1	...	4	6	6	3	82
	Uncertified	2	...	1	...	3	1	...	...	...	...	...	...	...	...	...	...	4
1. Common Infectious Diseases.	Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
	Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Diphtheria (including Membranous Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2. Diarrhœal Diseases. See notes to Table IV.	Diarrhœa, all forms	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
	Enteritis, Muco-Enteritis, Gastro-Enteritis	...	...	1	1	2	1	1	1	...	...	...	...	1	...	...	...	6
	Gastritis, Gastro-intestinal Catarrh	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	2
3. Wasting Diseases.	Premature Birth	8	2	2	1	13	2	1	...	...	...	...	...	...	...	...	...	16
	Congenital Defects (See notes to Table IV.)	3	...	...	...	3	1	...	...	...	...	...	...	...	...	...	...	4
	Injury at Birth	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	2
	Want of Breast-milk, Starvation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Atrophy, Debility, Marasmus	3	...	3	3	9	5	2	1	...	...	...	...	...	1	...	...	18
4. Tuberculous Diseases.	Tuberculous Meningitis (See notes to Table IV.)	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	1	4
	Tuberculous Peritonitis: Tabes Mesenterica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Tuberculous Diseases (See notes to Table IV.)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Other Causes.	Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rickets	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
	Meningitis (not Tuberculous)	...	...	...	1	1	...	1	...	...	...	...	...	1	...	1	...	4
	Convulsions	1	...	...	2	3	2	...	1	...	2	1	...	1	...	...	...	10
	Bronchitis	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	1	4
	Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pneumonia	...	...	...	...	...	...	1	...	...	1	...	...	...	1	1	...	4
	Suffocation, overlaying	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
	Other Causes	4	...	...	...	4	...	1	...	...	1	...	...	...	1	1	...	8
		22	2	6	8	38	11	7	5	...	5	1	...	4	6	6	3	86

Births in the year {legitimate, 814; illegitimate, 22}

Deaths in the year of {legitimate infants, 83; illegitimate infants, 3}

Deaths from **all Causes at all Ages**, 761.

Population (estimated to middle of 1909) 54,069.

TABLE VI.

Showing the total number of cases of Infectious Disease notified in the Borough, and the Deaths resulting therefrom, during the last 10 years (1900-1909). It includes the Deaths which occurred both in the Borough and in the Borough Infectious Diseases Hospital (outside the Borough).

	Number of Cases of Infectious Disease notified.											Deaths from Infectious Disease.											
	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	Total Cases for 10 years, 1900 to 1909.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	Total Deaths during 10 years 1900 to 1909.	Case Mortality (of all cases) in Borough and Borough Hospital for 10 years, 1900 to 1909.
Scarlet Fever	237	230	131	162	333	247	180	88	104	200	1912	4	7	3	7	10	3	10	2	1	2	49	2.56 per cent.
Small-pox	1	...	...	9	7	...	...	...	...	...	17	...	...	...	1	2	...	...	...	...	...	3	...
Diphtheria	19	59	26	23	36	31	40	19	34	46	340	2	12	4	2	2	5	3	4	9	4	52	15.29 ,,
Membranous Croup	...	3	4	...	...	...	...	...	...	...		...	3	2	...	...	...	...	...	...	...		
Typhus	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever	38	33	31	21	10	10	13	13	16	9	194	8	9	4	7	...	2	1	3	2	...	36	18.56 ,,
Continued Fever	...	1	1	...	...	1	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	19	23	34	39	32	22	35	27	17	24	272	...	1	1	1	...	...	3	3	...	1	10	3.67 ,,
Puerperal Fever	1	4	3	3	1	2	1	...	1	2	18	...	1	1	1	1	1	...	...	1	1	7	38.88 ,,
*Chicken Pox	...	...	58	194	217	99	107	81	163	99	...	...	...	...	...	...	...	...	...	...	...	...	...
**Measles	...	...	602	846	504	627	278	449	189	1183	...	2	1	7	12	9	6	4	7	2	7	57	1.15 ,, **
**Whooping Cough	...	...	138	537	233	70	210	227	348	19	...	5	16	5	13	5	1	3	4	6	...	58	2.08 .. **
Totals	315	353	1028	1834	1374	1109	864	904	872	1582	..	21	50	27	44	29	18	24	23	21	15	272	...

*Chicken Pox, Measles, and Whooping Cough were made compulsorily notifiable in Southport on May 8th, 1902.

**Calculated for the last eight years only, during which time Measles and Whooping Cough have been compulsorily notifiable in Southport.

TABLE VII.—Cases of Infectious Disease treated in the Borough Infectious Diseases Hospital during the last 10 years, 1900 to 1909.

	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	Totals for the 10 years, 1900 to 1909
Scarlet Fever............	147	160	92	121	261	177	142	60	79	160	1399
Small-pox	1	...	...	8	7	...	...	...	...	...	16
Diphtheria	2	15	6	2	3	11	18	6	23	23	109
Typhoid Fever	7	14	12	11	1	3	2	4	4	3	61
Continued Fever	...	...	1	...	...	...	...	...	...	...	1
Erysipelas................	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	...	1	...	...	...	...	...	...	...	...	1
Measles	...	...	...	...	...	...	...	...	...	2	2
German Measles	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	...	...	2	2	...	...	...	...	...	...	4
Totals	157	190	113	144	272	191	162	70	106	188	1593
Deaths occurred among the above cases as follows :—											
Scarlet Fever............	2	4	2	6	8	3	10	2	1	2	40
Small-pox	...	...	...	...	2	...	...	...	...	...	2
Diphtheria	...	2	1	...	..	...	2	...	7	...	12
Typhoid Fever	2	4	1	3	...	1	...	2	2	...	15
Measles	...	...	...	...	...	2	...	...	...	...	2
Totals	4	10	4	9	10	6	12	4	10	2	71

his Table, except in columns distinguished as "native" or "local," are gross figures, without correction, and on that account may in some cases be found to differ from the figures given in Tables I. to IV., which are corrected in accordance with the requirements of the Local Government Board, as stated in the notes appended to them.

	RTHS.		DEATHS.					DEATHS FROM																DEATHS OF PERSONS AGED,						ANNUAL RATES PER THOUSAND LIVING.							
YEAR.	Male.	Female.	Male.	Female.	Resident more than One Year.	Resident less than One Year.	Bad Lives Imported	Seven Zymotic Diseases.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhœa	Cholera and Choleraic Diarrhœa	Diseases of the Respiratory Organs.	Phthisis.	Violence.	Imported Phthisis.	Imported Diseases of the Respiratory Organs.	Deaths in Public Institutions.	Deaths under One Year of Age to 1000 Births.	0—1.	1—5.	5—15.	15—25.	25—60.	60 and upwards.	Births.	Deaths, Gross.	Deaths, Local.	Deaths, Zymotic.	Deaths, Native Phthisis.	Deaths, Diseases of Respiratory Organs, Gross.	Deaths, Diseases of Respiratory Organs Local.	Population. (Estimated to Middle of Year).
1871	264	242	221	203	—	—	—	65	24	3	5	2	6	15	10	1	56	59	11	—	—	38	170	86	47	20	37	140	94	27.97	23.44	—	3.59	—	3.09	—	18,086
1872	282	271	223	220	343	100	73	40	6	1	2	1	8	11	11	—	59	72	8	21	7	27	170	94	56	23	25	152	93	29.34	23.50	19.63	2.12	2.70	3.13	2.76	18,846
1873	278	300	230	220	353	106	65	78	—	1	32	—	3	22	20	—	58	68	9	33	8	32	164	95	50	39	24	139	112	29.43	23.37	20.06	3.97	1.78	2.95	2.64	19,638
1874	331	291	257	248	387	118	85	81	—	15	27	—	3	22	14	—	64	66	15	34	11	28	178	111	67	32	21	181	93	30.39	24.67	20.52	3.95	1.56	3.13	2.59	20,463
1875	336	331	306	287	475	118	81	70	1	—	7	1	6	39	16	—	90	87	12	27	13	31	183	123	55	27	43	193	152	28.81	25.65	22.14	3.02	2.59	3.89	3.33	23,113
1876	439	424	326	305	485	146	102	85	27	1	—	5	1	33	18	—	93	83	14	34	23	44	153	132	44	28	51	215	161	33.19	24.27	20.34	3.27	1.88	3.57	2.69	25,997
1877	463	456	291	329	503	117	106	53	1	1	2	17	5	13	14	—	104	75	17	25	20	22	123	113	67	39	34	202	165	33.87	22.85	18.94	1.95*	1.84	3.83	3.09	27,131
1878	481	444	332	314	518	128	111	70	—	4	14	7	—	14	31	—	94	87	16	32	14	20	151	140	70	29	37	200	170	32.66	22.81	18.89	2.47	1.94	3.32	2.82	28,317
1879	461	465	289	328	511	106	89	25	—	1	5	2	7	2	8	—	134	68	16	19	17	29	124	115	63	26	36	213	164	31.33	20.87	17.86	.84	1.65	4.53	3.95	29,554
1880	470	452	340	367	610	97	81	49	—	4	4	3	18	7	13	—	119	70	13	22	10	26	190	176	86	33	32	200	180	29.89	22.92	20.29	1.58	1.55	3.85	3.53	30,845
1881	457	460	290	278	462	106	90	44	—	5	11	6	5	10	7	1	94	73	13	28	12	24	100	92	76	27	30	173	170	28.48	17.64	14.84	1.36	1.39	2.92	2.55	32,191
1882	451	421	263	289	450	102	91	34	—	—	15	7	4	6	2	—	108	72	8	24	17	24	119	104	73	39	27	166	143	26.24	16.61	13.87	1.02	1.44	3.25	2.74	33,232
1883	438	411	423	335	558	100	93	51	—	8	7	4	18	6	8	—	144	72	10	17	7	29	134	114	85	30	38	195	196	24.97	19.35	16.61	1.50	1.61	4.23	4.03	34,077
1884	460	416	315	302	511	106	87	36	—	3	3	10	3	5	11	1	103	78	16	20	11	25	132	116	70	25	37	164	205	25.07	17.66	15.17	1.03	1.66	2.95	2.63	34,944
1885	453	419	317	317	517	117	93	37	—	4	3	8	12	5	5	—	108	65	20	19	15	28	141	123	71	24	27	193	196	24.34	17.72	15.10	1.03	1.28	3.01	2.60	35,833
1886	509	415	324	316	544	96	82	21	—	1	3	5	5	1	6	—	100	77	24	18	5	29	140	129	40	28	31	186	226	25.15	17.42	15.19	.57	1.61	2.72	2.59	36,745
1887	413	413	316	362	575	103	85	36	—	10	6	7	4	4	5	—	105	67	20	17	8	33	151	125	59	30	40	190	234	21.92	17.99	15.73	.96	1.33	2.79	2.57	37,681
1888	467	460	331	370	587	114	91	25	—	—	2	18	—	3	2	—	108	72	16	23	8	27	135	125	60	45	37	222	212	23.99	18.14	15.79	.65	1.27	2.80	2.59	38,640
1889	457	431	319	387	590	116	96	53	—	4	4	18	18	1	8	—	113	64	13	23	5	30	148	131	72	45	32	180	246	22.41	17.82	15.39	1.34	1.03	2.85	2.73	39,623
1890	428	431	319	386	584	121	95	41	—	4	13	14	5	2	3	—	127	65	14	19	7	41	122	105	63	41	28	225	243	21.14	17.35	15.01	1.01	1.13	3.13	2.95	40,631
1891	475	522	369	422	656	135	112	34	—	1	7	3	9	5	9	—	160	68	18	19	18	35	124	124	61	38	35	234	299	23.99	19.03	16.34	.82	1.18	3.85	3.41	41,561
1892	488	439	403	405	686	122	101	53	—	14	17	7	7	4	4	—	138	69	19	14	15	35	125	116	69	34	27	246	316	21.97	19.22	16.83	1.25	1.30	3.27	2.91	42,187
1893	494	499	366	372	617	121	102	49	—	3	7	6	3	14	14	2	122	71	22	17	11	43	146	145	68	24	40	231	230	23.19	17.30	14.92	1.14	1.26	2.84	2.59	42,823
1894	505	461	353	332	577	108	88	51	—	1	8	12	23	5	1	1	91	58	16	14	3	44	143	139	64	35	27	205	215	22.22	15.85	13.82	1.17	1.01	2.09	2.02	43,469
1895	535	497	370	429	695	104	84	42	—	1	6	3	1	9	22	—	138	61	24	19	11	49	137	142	55	27	36	229	310	23.38	18.15	16.25	.95	.95	3.13	2.88	44,124
1896	545	491	330	353	572	111	89	45	—	6	13	5	8	2	10	1	95	54	17	10	9	47	129	134	60	22	31	195	241	23.13	15.40	13.64	1.00	.98	2.12	1.92	44,789
1897	507	496	381	421	669	133	101	54	—	4	5	5	14	2	22	2	114	81	17	19	9	50	181	182	70	24	38	231	257	22.06	17.70	15.48	1.18	1.36	2.51	2.31	45,464
1898	509	470	350	370	659	111	95	40	—	7	1	3	7	3	19	—	116	70	17	12	14	56	138	135	50	21	42	230	242	21.21	15.71	13.65	.86	1.26	2.51	2.21	46,149
1899	499	510	384	432	675	141	112	57	—	4	6	6	15	10	16	—	142	68	24	18	19	71	165	167	57	24	48	231	289	21.54	17.46	15.03	1.21	1.07	3.03	2.62	46,844
1900	501	468	364	424	686	102	71	32	—	2	4	2	5	8	11	—	143	77	15	15	10	52	144	140	45	23	35	230	315	20.38	16.57	15.08	.67	1.30	3.01	2.79	47,550
1901	478	459	384	395	674	105	79	79	—	1	7	15	16	9	31	—	114	53	18	17	11	56	163	153	66	32	31	238	259	19.42	16.15	14.51	1.64	.75	2.36	2.13	48,250
1902	479	463	346	397	621	122	103	31	—	7	3	6	5	4	6	—	123	40	18	12	20	63	142	134	59	32	22	201	295	19.42	15.32	13.20	.64	.58	2.53	2.12	48,500
1903	448	456	331	387	607	111	85	48	1	12	7	2	13	7	6	—	104	36	22	12	16	57	138	125	55	19	33	200	286	18.20	14.45	12.74	.97	.50	2.09	1.77	49,669
1904	478	404	358	362	622	98	72	37	2	9	10	2	5	0	9	—	97	53	21	12	13	43	130	115	50	18	27	210	300	17.51	14.29	12.86	.73	.81	1.93	1.66	50,385
1905	478	443	325	369	604	90	79	22	—	6	3	5	1	2	5	—	96	53	22	11	11	44	114	105	44	25	33	188	299	18·02	13·58	12·03	·43	·82	1·88	1·66	51,107
1906	431	418	348	403	635	116	102	34	—	4	10	3	3	1	13	—	117	70	13	14	15	57	115	98	49	22	28	239	315	16·38	14·49	12·52	·66	1·08	2·26	1·97	51,837
1907	430	451	348	406	657	97	88	20	—	7	2	4	4	3	—	—	123	63	9	9	18	58	98	86	43	20	39	206	360	16·70	14·34	12·67	·38	1·01	2·34	2·00	52,574
1908	437	461	309	381	601	89	85	26	—	2	1	9	6	2	6	—	75	50	17	4	10	57	104	93	30	21	15	203	328	16·84	12·94	11·35	·49	·86	1·41	1·22	53,318
1909	446	390	324	421	678	67	52	14	—	7	2	4	—	—	1	—	121	45	15	7	11	52	103	86	45	23	24	201	366	15·46	13·78	12·82	·26	·70	2·24	2·03	54,069

*Infectious Diseases Hospital built in 1877.

THS